

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

Date of mailing: 31 August 2000 (31.08.00)	in its capacity as elected Office
International application No.: PCT/US00/04185	Applicant's or agent's file reference: 7442/JB
International filing date: 18 February 2000 (18.02.00)	Priority date: 22 February 1999 (22.02.99)
Applicant: SCHEPER, William, Michael et al	

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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 7442/JB	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US00/04185	International filing date (day/month/year) 18/02/2000	Priority date (day/month/year) 22/02/1999	
International Patent Classification (IPC) or national classification and IPC C11D1/72			
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Applicant THE PROCTER & GAMBLE COMPANY et al.		NOV 09 2001	

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

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Date of submission of the demand 17/07/2000	Date of completion of this report 05.07.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Drew, C Telephone No. +49 89 2399 8494



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/0418

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):
Description, pages:

1-70 as originally filed

Claims, No.:

1-9 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/04185

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims
	No:	Claims 1 to 6 and 9
Inventive step (IS)	Yes:	Claims
	No:	Claims 7 and 8
Industrial applicability (IA)	Yes:	Claims 1 to 9
	No:	Claims

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/04185

1 The following documents (D) from the international search report (ISR) will be referred to:

D1 WO 97 04058 A (HENKEL KGAA) 6 February 1997 (1997-02-06)
D2 WO 97 22651 A (PROCTER & GAMBLE) 26 June 1997 (1997-06-26)
D3 WO 98 10051 A (HENKEL KGAA) 12 March 1998 (1998-03-12)
D4 WO 92 15664 A (CIBA GEIGY AG) 17 September 1992 (1992-09-17)
D5 EP-A-0 661 043 (KAO CORP) 5 July 1995 (1995-07-05)

Section V

2 *Novelty (Article 33(2) PCT)*

2.1 The documents from the ISR disclose various detergent, shampoo and personal cleaning compositions comprising capped nonionic surfactants exhibiting X/Y values, determined according to the method set out on present page 6, in excess of one. To save unnecessary repetition only the documents set out on paragraph 1 above will be considered in detail in this written opinion. Thus:

2.2 D1 discloses compositions comprising nonionic surfactants of the fatty alcohol oligoethoxylate and/or oligopropoxylate type. Particular attention is drawn to the nonionic-surfactants employed in example 1.

2.3 D2 relates to nonionic surfactants prepared from glycidyl ethers for use in cleaning compositions and carriers for non- or low-aqueous cleaning compositions. The compositions of examples XI to XIII include capped ethoxylated alcohols, e.g. 2-butyl-C8E11.8OCH₃, as nonionic surfactants.

2.4 Claim 3 of D3 describes detergent compositions comprising capped ethoxylated and/or propoxylated alcohols as nonionic surfactants. The examples set out in table 1 on page 7 include cocofat alcohol10EObutyl ether.

**INTERNATIONAL PRELIMINARY
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International application No. PCT/US00/04185

- 2.5 The nonionic surfactants described in claim 1 of D4 are C2 to C4 alkoxylated alcohols which may be capped, see also examples 6 and 9 on pages 11 and 12.
- 2.6 The disclosure of claim 1 and example 15 of D5 is similar to that of D4.
- 2.7 Consequently claims 1 to 6 and 9 would appear to lack novelty. Claims 7 and 8, on the other hand, would seem to be novel.

3 *Inventive Step (Article 33(3) PCT)*

- 3.1 Claim 7 relates to two types of nonionic surfactants, i.e. (a) the alkyl capped ethoxylated and propoxylated alcohols of the final three formulae and (b) the butoxy capped alcohols of the remaining formulae. Claim 8 is also concerned with butoxy capped alcohols and can therefore be considered along with claim 7(b).
- 3.2 D1 would appear to be the closest state of the art for claim 7(a) as it employs alkyl capping to increase the solubility of nonionic surfactants. Since the final three formulae of this claim are included within the definition of capped nonionic surfactants appearing in D1, claim 7(a) cannot exhibit an inventive step.
- 3.3 The butoxy capped alcohols of claims 7(b) and 8 cannot be considered as capped in the same sense as those of claim 7(a) since there is no blocking of the terminal -OH group as with alkyl capping. These claims would not appear to be inventive in view of the fact that D4 and D5 already envisage the use of butoxy containing alcohols both with and without alkyl capping. Moreover, the application contains no comparative data at all. Inventive step would therefore need to be established, e.g. by comparative data against conventional uncapped nonionic surfactants.

Section VII

- 4 None of D1, D4 or D5 is acknowledged in the opening paragraphs of the description, see Rule 5.1(a)(ii) PCT.

**INTERNATIONAL PRELIMINARY
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International application No. PCT/US00/04185

S ction VIII

5 Clarity (Article 6 PCT)

5.1 The application is not consistent in the presentation of the invention. Thus, the claims specify that the nonionic surfactant is capped and exhibits an X/Y number greater than unity, while the summary of the invention on pages 2 and 3 requires butoxy capped alcohols. In this respect there may be some doubt about the exact meaning of the term "butoxy". Having regard to the formulae appearing in claims 7 and 8 and example 1 on pages 59 and 60 the examiner assumes that this expression refers to divalent C₄H₈O blocks.

5.2 The reference in claim 9 to the compositions further comprising detergives adjuncts renders the scope of claims 1 and 3 to 6 unclear as to whether the compositions of these claims should already include additives or adjuncts.



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C11D 1/72, 17/00, A61K 7/50		A3	(11) International Publication Number: WO 00/50549 (43) International Publication Date: 31 August 2000 (31.08.00)
<p>(21) International Application Number: PCT/US00/04185</p> <p>(22) International Filing Date: 18 February 2000 (18.02.00)</p> <p>(30) Priority Data: 60/121,171 22 February 1999 (22.02.99) US</p> <p>(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): SCHEPER, William, Michael [US/US]; 2393 Picnic Woods Drive, Lawrenceburg, IN 47025 (US). KLUESENER, Bernard, William [US/US]; 11619 New Biddinger Road, Harrison, OH 45030 (US). SIVIK, Mark, Robert [US/US]; 2434 Sheffield Court, Ft. Mitchell, KY 41017 (US). JORDAN, Glenn, Thomas, IV [US/US]; 5750 Ridgeview Drive, Indian Springs, OH 45011 (US). VINSON, Philip, Kyle [US/US]; 5803 Windermere Lane, Fairfield, OH 45014 (US).</p> <p>(74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).</p>		<p>(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p> <p>(88) Date of publication of the international search report: 2 November 2000 (02.11.00)</p>	
<p>(54) Title: CLEANING COMPOSITIONS CONTAINING SELECTED NONIONIC SURFACTANTS</p> <p>(57) Abstract</p> <p>A cleaning composition, e.g. granular or liquid laundry detergent, dishwashing liquid shampoo, personal cleansing composition or hard surface cleaning composition, contains a capped nonionic surfactant with an X/y number greater than 1.</p>			

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INTERNATIONAL SEARCH REPORT

Inte. Jonal Application No

PCT/US 00/04185

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C11D1/72 C11D17/00 A61K7/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 C11D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 22651 A (PROCTER & GAMBLE) 26 June 1997 (1997-06-26)	1-3,6,9
A	abstract page 54, paragraph 3; claim 1; examples XI-XIII ---	7,8
X	WO 98 10051 A (HENKEL KGAA) 12 March 1998 (1998-03-12)	6,8,9
A	page 4, paragraph 2; table 1 ---	7
X	US 4 443 363 A (KLINGER WOLFGANG ET AL) 17 April 1984 (1984-04-17)	6,8,9
A	claim 1; examples 5-7 ---	7
X	US 4 548 729 A (SCHMID KARL ET AL) 22 October 1985 (1985-10-22)	6,8,9
A	abstract; examples 5,6,8,9 ---	7
	-/-	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

28 June 2000

23/08/2000

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INTERNATIONAL SEARCH REPORT

Int'l. Jonal Application No
PCT/US 00/04185

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 05441 A (HENKEL KGAA) 23 February 1995 (1995-02-23) abstract; examples 4.1,4.5 ---	6,9
A		7,8
X	WO 97 04058 A (HENKEL KGAA) 6 February 1997 (1997-02-06) claims 1,6,20; example 1 ---	1,9
X	EP 0 054 366 A (ICI PLC) 23 June 1982 (1982-06-23) examples ---	1,9
X	WO 92 15664 A (CIBA GEIGY AG) 17 September 1992 (1992-09-17) page 7, paragraph 10 -page 8, paragraph 2; examples 6,9 ---	3,9
X	EP 0 661 043 A (KAO CORP) 5 July 1995 (1995-07-05) example 15 ---	5,9
X	EP 0 224 167 A (HENKEL KGAA) 3 June 1987 (1987-06-03) page 2, line 1 - line 9; examples 1B-1I ---	5,9
X	GB 2 158 080 A (ABM CHEMICALS LTD) 6 November 1985 (1985-11-06) example 5 ---	6,9
A	EP 0 859 044 A (PROCTER & GAMBLE) 19 August 1998 (1998-08-19) examples C-F ---	6-9
A	US 4 780 237 A (SCHMID KARL-HEINZ ET AL) 25 October 1988 (1988-10-25) abstract; examples 8,9 ---	6-9
A	EP 0 709 450 A (PROCTER & GAMBLE) 1 May 1996 (1996-05-01) page 11, line 40 - line 45; claim 1; example 2 ---	2,3,5,6, 9
A	WO 99 06466 A (PROCTER & GAMBLE) 11 February 1999 (1999-02-11) examples 13,15,16 -----	4,6-9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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